## A General Purpose Stereoscopic 3D Format Conversion System and Method

Adam W. Divelbiss, Ph.D., David C. Swift, and Walter Tserkovnyuk

## **ABSTRACT**

Because of the numerous possibilities in the capture, transmission, and display of stereoscopic image pairs during 3D format conversion, there are numerous compatibility issues between the various stereoscopic image sources and stereoscopic display systems. A general purpose stereoscopic 3D format conversion system and method is described that eliminates these compatibility issues by providing a system that performs conversion of any stereoscopic image stream within a specified set of 3D formats to any other 3D format within the set. The system also performs numerous other image processing functions that are beneficial for stereoscopic image processing such as image pan, alignment, zoom, crop, keystone correction, video format conversion, scan-rate conversion, and an array of standard 2D image enhancements including brightness, contrast, hue saturation, and sharpness.